AMENDMENT TO THE CLAIMS

1.(Currently Amended) A method of measuring the electrical efficacy of a plurality of groups of one or more battery cells ~~for use~~ while in use in an uninterruptable power supply, the method comprising:

measuring, ~~at least one of an a.c. component of a current through the battery cell or cells and~~ using simultaneous electrical connections across each group of cells, an a.c. component of a voltage across ~~the said battery cell or~~ each group of cells, the a.c. component arising from a ripple current in ~~the said battery cell or~~ said plurality of groups of one or more cells while in use; and

determining the electrical efficacy of ~~the cell or~~ each group of cells on the basis of the ~~or at least one of the~~ measured a.c. ~~current and~~ voltage components.

2.(Currently Amended) The method of claim 1, in which the step of determining the electrical efficacy of each group of cells includes obtaining ~~a~~ numerical values from the ~~or at least one of the~~ measured a.c. ~~current and~~ voltage components.

3.(Currently Amended) The method of claim 2, in which the electrical efficacy of ~~the or each battery~~ one of the groups of battery cells is determined by comparison of the ~~said~~ associated numerical value with a corresponding further numerical value obtained by measurement of an a.c. ~~current and/or~~ voltage component~~s~~ from ~~one or more different~~ another of the other groups of cells.

4.(Currently Amended) The method of claim 3, in which the electrical efficacy of one of the groups of battery cells is

determined by comparison of the ~~said~~ associated numerical value with the average of a plurality of further numerical values obtained by measurements of the a.c. ~~current and/or~~ voltage components from a corresponding plurality of ~~separate arrays of single or multiple cells respectively~~ the other groups of cells.

5.(Currently Amended) The method of claim 2, in which the electrical efficacy of ~~the~~ each group of battery ~~cell or~~ cells is determined by comparison of ~~the said~~ each associated numerical value with a corresponding predetermined numerical value.

6.(Currently Amended) The method of claim 1, further comprising the steps of measuring both ~~the~~an a.c. component of current through the plurality of groups of battery ~~cell or~~ cells and the a.c. component of the voltage across ~~the~~ each said group of battery ~~cell or~~ cells; and obtaining a value for the internal impedance of ~~the~~ each group of battery ~~cell or~~ cells via a combination of ~~the~~ said current component and ~~the~~ said voltage component.

7.(Currently Amended) The method of claim 1, in which the step of measuring ~~at least one of the a.c. components of a current and a voltage~~ includes the steps of:

measuring electrical signals representative of ~~at least one of~~ one of the voltage level across ~~the cell or~~ each group of cells and the current level through the ~~cell or~~ plurality of groups of cells; and

frequency filtering the ~~or each~~each ~~—~~measured electrical signal to extract the ~~said~~ measured a.c. component arising from the ripple current.

8.(Currently Amended) The method of claim 7, in which the steps of filtering includes isolating a band of frequencies from ~~the or~~

~~each~~each ~~said~~ measured electrical signal~~s~~.

9.(Currently Amended) The method of claim 7, in which the step of filtering includes isolating a band of frequencies including those frequencies which include at least one harmonic frequency of ~~the~~ an a.c. ~~mains~~ main frequency.

10.(Original) The method of claim 9, including isolating a band of frequencies around 900 Hz.

11.(Original) The method of claim 9, including isolating a band of frequencies around 1080 Hz.

12.(Canceled)

13.(Currently Amended) An apparatus for measuring the electrical efficacy of a plurality of groups of one or more battery cells ~~for~~ while in use in an uninterruptable power supply, the apparatus comprising:

simultaneous electrical connections across each group of cells;

voltage measuring means connected to said simultaneous electrical connections and ~~a voltmeter~~ arranged to thereby measure ~~an the~~ an a.c. component of a voltage across ~~the battery cell or~~ each group of cells, the a.c. voltage component arising from a ripple current in ~~the~~ said plurality of groups of one or more battery ~~cell or~~ cells while in use, the electrical efficacy of ~~the cell or~~ each group of cells being determined on the basis of the measured a.c. voltage component~~s~~.

14.(Currently Amended) An apparatus as claimed in claim 13, further comprising an ammeter arranged to measure an a.c.

component of a current flowing through the battery cell or cells, the a.c. current component also arising from ~~the~~ said ripple current in ~~the~~ said plurality of groups of one or more battery ~~cell or~~ cells while in use, the electrical efficacy of ~~the cell or~~ each group of cells being determined on the basis of both the measured a.c. voltage components and the a.c. current component.

15.(Currently Amended) An apparatus as claimed in claim 14, in which the electrical efficacy is determined on the basis of ~~an~~ impedances calculated from the ratio of ~~the~~ said measured a.c. voltage components to ~~the~~ said measured a.c. current component.

16.(Previously Presented) An apparatus as claimed in claim 12, further comprising a frequency filter arranged to pass a band of frequencies including the frequency of the a.c. component arising from the ripple current.

17.(Original) An apparatus as claimed in claim 16 in which the filter is a fifth order band pass filter.

18.(Currently Amended) An apparatus as claimed in claim 17, in which the filter is arranged to pass a band of frequencies including at least one harmonic frequency of an a.c. ~~mains~~ main frequency.

19.(Original) An apparatus as claimed in claim 18, in which the filter is arranged to pass a band of frequencies including 900 Hz.

20.(Original) An apparatus as claimed in claim 18, in which the filter is arranged to pass a band of frequencies including 1080 Hz.

21-25.(Canceled)